Test Report

Liquid and Plastic Limit by Cone Apparatus

Project Name	1. Improvement of roads and drain at kogilu layout main road and cross road in ward no 05 byatarayanapura sub division 2. Improvement of roads and drain at kattigenahalli kuvempunagara cross road in ward no 05 byatarayanapura sub division 3. Improvement of drain at dwarakanagara srirama temple road in ward no 05 byatarayanapura sub division 4. Improvement of roads and drain at kattigenahalli surrounding area in ward no 05 byatarayanapura sub division 5. Improvement of roads and drain at nirantara layout in ward no 05 byatarayanapura sub division 6. Improvement of drain and asphalting to road at agrahara layout harihara temple surrounding area in ward no 05 byatarayanapura sub division
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2017-2018/QR/P-8/02
Mix Type	Wet Mix Macadam
Contractor	Sri A Chennareddy
Test Method	Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Wet Mix Plant
Material	Coarse Aggregates
Sample No	4
Date	19-May-2018

Sl No	Description	Unit	Liquid Limit	Plastic Limit
	Penetration	mm		-
1	Container No	no		
2	Weight of container,(A)	gm		
3	Weight of container + wet soil, (B)	gm	**Non Plastic**	**Non Plastic**
4	Weight of container + dry soil, (C)	gm		
5	Weight of water, D=(B - C)	gm		
6	Weight of dry soil, E=(C - A)	gm		
7	Water Content, D/E x 100 (%)	gm		

Comments: <6 so Non Plastic

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Test Report

Liquid and Plastic Limit by Cone Apparatus

Project Name	1. Improvement of roads and drain at kogilu layout main road and cross road in ward no 05 byatarayanapura sub division 2. Improvement of roads and drain at kattigenahalli kuvempunagara cross road in ward no 05 byatarayanapura sub division 3. Improvement of drain at dwarakanagara srirama temple road in ward no 05 byatarayanapura sub division 4. Improvement of roads and drain at kattigenahalli surrounding area in ward no 05 byatarayanapura sub division 5. Improvement of roads and drain at nirantara layout in ward no 05 byatarayanapura sub division 6. Improvement of drain and asphalting to road at agrahara layout harihara temple surrounding area in ward no 05 byatarayanapura sub division
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2017-2018/QR/P-8/02
Mix Type	Wet Mix Macadam
Contractor	Sri A Chennareddy
Test Method	Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Wet Mix Plant
Material	Coarse Aggregates
Sample No	5
Date	2-Jun-2018

Sl No	Description	Unit	Liquid Limit	Plastic Limit
	Penetration	mm		
1	Container No	no		
2	Weight of container,(A)	gm		
3	Weight of container + wet soil, (B)	gm	**Non Plastic**	**Non Plastic**
4	Weight of container + dry soil, (C)	gm		
5	Weight of water, D=(B - C)	gm		
6	Weight of dry soil, E=(C - A)	gm		
7	Water Content, D/E x 100 (%)	gm		

Comments: <6 so Non Plastic

Note:

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Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Test Report
Liquid and Plastic Limit by Cone Apparatus

Project Name	1. Improvement of roads and drain at kogilu layout main road and cross road in ward no 05 byatarayanapura sub division 2. Improvement of roads and drain at kattigenahalli kuvempunagara cross road in ward no 05 byatarayanapura sub division 3. Improvement of drain at dwarakanagara srirama temple road in ward no 05 byatarayanapura sub division 4. Improvement of roads and drain at kattigenahalli surrounding area in ward no 05 byatarayanapura sub division 5. Improvement of roads and drain at nirantara layout in ward no 05 byatarayanapura sub division 6. Improvement of drain and asphalting to road at agrahara layout harihara temple surrounding area in ward no 05 byatarayanapura sub division
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2017-
Mix Type	Wet Mix Macadam
Contractor	Sri A Chennareddy
Test Method	Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Wet Mix Plant
Material	Coarse Aggregates
Sample No	6
Date	9-Jun-2018

Sl No	Description	Unit	Liquid Limit	Plastic Limit
	Penetration	mm		-
1	Container No	no		
2	Weight of container,(A)	gm		
3	Weight of container + wet soil, (B)	gm	**Non Plastic**	**Non Plastic**
4	Weight of container + dry soil, (C)	gm		
5	Weight of water, D=(B - C)	gm		
6	Weight of dry soil, E=(C - A)	gm		
7	Water Content, D/E x 100 (%)	gm		

Comments: <6 so Non Plastic

Note:

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Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Test Report
Field Density Test by Sand Replacement Method

Project Name	1. Improvement of roads and drain at kogilu layout main road and cross road in ward no 05 byatarayanapura sub division 2. Improvement of roads and drain at kattigenahalli kuvempunagara cross road in ward no 05 byatarayanapura sub division 3. Improvement of drain at dwarakanagara srirama temple road in ward no 05 byatarayanapura sub division 4. Improvement of roads and drain at kattigenahalli surrounding area in ward no 05 byatarayanapura sub division 5. Improvement of roads and drain at nirantara layout in ward no 05 byatarayanapura sub division 6. Improvement of drain and asphalting to road at agrahara layout harihara temple surrounding area in ward no 05 byatarayanapura sub division
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2017-2018/QR/P-
Mix Type	Wet Mix Macadam
Contractor	Sri A Chennareddy
Test Method	IS: 2720 (Part - 16) 1963 & Specification for Road & Bridge Works,
Location	bay
Material	Wet Mix Macadam
Sample No	1
Date	23-May-2018

Test Hole No	1
MDD	2.24
OMC in %	3.2
Bulk Density Ys	1.392
Weight of Sand In cone W1 (gm)	1195
Weight Of Wet soil From Hole (W2)	4325
Wt Of Sand +Cylinder Before Pouring (W3)gm	17000
Wt Of Sand +Cylinder After Pouring (W4) gm	13176
Wt Of Sand In Hole: W5 = W3 - W4- W1 (gm)	2629
Volume of Hole: V= W5/ Ys	1888.65
Bulk Density Yb= W2/V (gm/cc)	2.29
Moisture Meter Reading (%)	1.63
Moisture Content : w (From Graph In %)	3.25
Dry Density Yd = Yb/(1+W/100)	2.22
Field Compaction(%)	99.01

Note:

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Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Test Report
Field Density Test by Sand Replacement Method

Project Name	1. Improvement of roads and drain at kogilu layout main road and cross road in ward no 05 byatarayanapura sub division 2. Improvement of roads and drain at kattigenahalli kuvempunagara cross road in ward no 05 byatarayanapura sub division 3. Improvement of drain at dwarakanagara srirama temple road in ward no 05 byatarayanapura sub division 4. Improvement of roads and drain at kattigenahalli surrounding area in ward no 05 byatarayanapura sub division 5. Improvement of roads and drain at nirantara layout in ward no 05 byatarayanapura sub division 6. Improvement of drain and asphalting to road at agrahara layout harihara temple surrounding area in ward no 05 byatarayanapura sub division
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2017-2018/QR/P-8/02
Mix Type	Wet Mix Macadam
Contractor	Sri A Chennareddy
Test Method	IS: 2720 (Part - 16) 1963 & Specification for Road & Bridge Works,
Location	bay
Material	Wet Mix Macadam
Sample No	2
Date	27-May-2018

Test Hole No	**2**
MDD	2.24
OMC in %	3.20
Bulk Density Ys	1.39
Weight of Sand In cone W1 (gm)	1195.00
Weight Of Wet soil From Hole (W2)	4328.00
Wt Of Sand +Cylinder Before Pouring (W3)gm	17000.00
Wt Of Sand +Cylinder After Pouring (W4) gm	13169.00
Wt Of Sand In Hole: W5 = W3 - W4- W1 (gm)	2636.00
Volume of Hole: V= W5/ Ys	1893.68
Bulk Density Yb= W2/V (gm/cc)	2.29
Moisture Meter Reading (%)	1.61
Moisture Content : w (From Graph In %)	3.42
Dry Density Yd = Yb/(1+W/100)	2.21
Field Compaction(%)	98.66

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Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Test Report

Field Density Test by Sand Replacement Method

Project Name	1. Improvement of roads and drain at kogilu layout main road and cross road in ward no 05 byatarayanapura sub division 2. Improvement of roads and drain at kattigenahalli kuvempunagara cross road in ward no 05 byatarayanapura sub division 3. Improvement of drain at dwarakanagara srirama temple road in ward no 05 byatarayanapura sub division 4. Improvement of roads and drain at kattigenahalli surrounding area in ward no 05 byatarayanapura sub division 5. Improvement of roads and drain at nirantara layout in ward no 05 byatarayanapura sub division 6. Improvement of drain and asphalting to road at agrahara layout harihara temple surrounding area in ward no 05 byatarayanapura sub division
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2017-2018/QR/P-
Mix Type	Wet Mix Macadam
Contractor	Sri A Chennareddy
Test Method	IS: 2720 (Part - 16) 1963 & Specification for Road & Bridge Works,
Location	bay
Material	Wet Mix Macadam
Sample No	3
Date	6-Jun-2018

Test Hole No	**3**
MDD	2.24
OMC in %	3.20
Bulk Density Ys	1.39
Weight of Sand In cone W1 (gm)	1195.00
Weight Of Wet soil From Hole (W2)	4435.00
Wt Of Sand +Cylinder Before Pouring (W3)gm	17000.00
Wt Of Sand +Cylinder After Pouring (W4) gm	13114.00
Wt Of Sand In Hole: W5 = W3 - W4- W1 (gm)	2691.00
Volume of Hole: V= W5/ Ys	1933.19
Bulk Density Yb= W2/V (gm/cc)	2.29
Moisture Meter Reading (%)	1.57
Moisture Content : w (From Graph In %)	3.29
Dry Density Yd = Yb/(1+W/100)	2.22
Field Compaction(%)	99.15

Note:

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Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Test Report
Field Density Test by Sand Replacement Method

Project Name	1. Improvement of roads and drain at kogilu layout main road and cross road in ward no 05 byatarayanapura sub division 2. Improvement of roads and drain at kattigenahalli kuvempunagara cross road in ward no 05 byatarayanapura sub division 3. Improvement of drain at dwarakanagara srirama temple road in ward no 05 byatarayanapura sub division 4. Improvement of roads and drain at kattigenahalli surrounding area in ward no 05 byatarayanapura sub division 5. Improvement of roads and drain at nirantara layout in ward no 05 byatarayanapura sub division 6. Improvement of drain and asphalting to road at agrahara layout harihara temple surrounding area in ward no 05 byatarayanapura sub division
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2017-2018/QR/P-
Mix Type	Wet Mix Macadam
Contractor	Sri A Chennareddy
Test Method	IS: 2720 (Part - 16) 1963 & Specification for Road & Bridge Works,
Location	bay
Material	Wet Mix Macadam
Sample No	4
Date	23-May-2018

Test Hole No	**4**
MDD	2.24
OMC in %	3.20
Bulk Density Ys	1.39
Weight of Sand In cone W1 (gm)	1195.00
Weight Of Wet soil From Hole (W2)	4431.00
Wt Of Sand +Cylinder Before Pouring (W3)gm	17000.00
Wt Of Sand +Cylinder After Pouring (W4) gm	13126.00
Wt Of Sand In Hole: W5 = W3 - W4- W1 (gm)	2679.00
Volume of Hole: V= W5/ Ys	1924.57
Bulk Density Yb= W2/V (gm/cc)	2.30
Moisture Meter Reading (%)	1.54
Moisture Content : w (From Graph In %)	3.37
Dry Density Yd = Yb/(1+W/100)	2.23
Field Compaction(%)	99.43

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Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Test Report
Field Density Test by Sand Replacement Method

Project Name	1. Improvement of roads and drain at kogilu layout main road and cross road in ward no 05 byatarayanapura sub division 2. Improvement of roads and drain at kattigenahalli kuvempunagara cross
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2017-2018/QR/P-
Mix Type	Wet Mix Macadam
Contractor	Sri A Chennareddy
Test Method	IS: 2720 (Part - 16) 1963 & Specification for Road & Bridge Works,
Location	bay
Material	Wet Mix Macadam
Sample No	5
Date	23-May-2018

Test Hole No	**5**
MDD	2.24
OMC in %	3.20
Bulk Density Ys	1.39
Weight of Sand In cone W1 (gm)	1195.00
Weight Of Wet soil From Hole (W2)	4327.00
Wt Of Sand +Cylinder Before Pouring (W3)gm	17000.00
Wt Of Sand +Cylinder After Pouring (W4) gm	13159.00
Wt Of Sand In Hole: W5 = W3 - W4- W1 (gm)	2646.00
Volume of Hole: V= W5/ Ys	1900.86
Bulk Density Yb= W2/V (gm/cc)	2.28
Moisture Meter Reading (%)	1.73
Moisture Content : w (From Graph In %)	3.43
Dry Density Yd = Yb/(1+W/100)	2.20
Field Compaction(%)	98.25

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Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Test Report
Workability

Project Name	1. Improvement of roads and drain at kogilu layout main road and cross road in ward no 05 byatarayanapura sub division 2. Improvement of roads and drain at kattigenahalli kuvempunagara cross road in ward no 05 byatarayanapura sub division 3. Improvement of drain at dwarakanagara srirama temple road in ward no 05 byatarayanapura sub division 4. Improvement of roads and drain at kattigenahalli surrounding area in ward no 05 byatarayanapura sub division 5. Improvement of roads and drain at nirantara layout in ward no 05 byatarayanapura sub division 6. Improvement of drain and asphalting to road at agrahara layout harihara temple surrounding area in ward no 05 byatarayanapura sub division
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2017-2018/QR/P-8/02
Mix Type	Pavement Quality Concrete(M30)
Contractor	Sri A Chennareddy
Test Method	IS : 4031 (Part 5) -1988 & Specification for Road & Bridge Works, MORT&H, Rev-V.
Location	At site
Material	Concrete
Sample No	1
Date	28-May-2018

Sl. No.	Determination	Trial 1	Trial 2
1	Bottom Diameter(cm)	20	20
2	Top Diameter(cm)	10	10
3	Height(cm)	30	30
4	Slump(mm)	29	27
5	Average	28	

Comments: Maximum allowable slump as per MORT&H is 25±15mm

Note:

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Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Test Report
Concrete Compresive strength

Project Name	1. Improvement of roads and drain at kogilu layout main road and cross road in ward no 05 byatarayanapura sub division 2. Improvement of roads and drain at kattigenahalli kuvempunagara cross road in ward no 05 byatarayanapura sub division 3. Improvement of drain at dwarakanagara srirama temple road in ward no 05 byatarayanapura sub division 4. Improvement of roads and drain at kattigenahalli surrounding area in ward no 05 byatarayanapura sub division 5. Improvement of roads and drain at nirantara layout in ward no 05 byatarayanapura sub division 6. Improvement of drain and asphalting to road at agrahara layout harihara temple surrounding area in ward no 05 byatarayanapura sub division
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2017-2018/QR/P-8/02
Mix Type	Pavement Quality Concrete(M30)
Contractor	Sri A Chennareddy
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Bay
Material	concrete
Sample No	1
Date	4-Jun-2018

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength
1	30	7	7.57	150*150*150	2242.96	503.00	0.0225	22.36	22.86	23.28
2	30	7	7.62	150*150*150	2257.78	514.00	0.0225	22.84		
3	30	7	7.29	150*150*150	2160.00	526.00	0.0225	23.38		
4	30	7	7.73	150*150*150	2290.37	534.00	0.0225	23.73	23.70	
5	30	7	7.56	150*150*150	2240.00	537.00	0.0225	23.87		
6	30	7	7.38	150*150*150	2186.67	529.00	0.0225	23.51		

Results: 7-days Compressive strength of cement is 23.28 N/mm2

Note:

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